



Georgia-Pacific Corporation

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April 9, 1993

RECEIVED

APR 12 1993

DIVISION OF
OIL GAS & MINING

Mr. D. Wayne Hedberg
Permit Supervisor
355 West North Temple
3 Triad Center, Suite 350
Salt Lake City, UT 84180-1203

Re: San Rafael Gypsum Quarry Large Mine Notice of Intent,
Georgia-Pacific Corporation, M/015/050, Emery County, Utah

Dear Mr. Hedberg:

This letter is in response to your letter dated December 23, 1992 concerning Georgia-Pacific Quarry Operation at San Rafael, Emery County. The following is our response to your review questions which you have raised in your letter.

Please contact me, should you have questions or concerns regarding this project.

R 649-4-105

105.2.11 Proposed Surface Facilities

✓ We have amended our submitted surface facilities map by adding sketch (A) showing the drainage control structures.

105.2.11 Border Outlining Acreage

✓ We currently estimate that we have disturbed 10 ac. We believe we will be disturbing on the average 3 ac/yr. in the future, our total disturbance should not exceed 33 acres over the next five years.

It is assumed that some of the specific measures and the schedule for mining activities discussed in the plan may change over the life of the Georgia-Pacific Quarry. In these cases, Georgia-Pacific will coordinate with the BLM and DNR to amend it's state permit.

105.3 Maps, Drawing and Cross-Section

7 Current mining plans have been developed on very little knowledge of the underlying geological structure. At present, it must be assumed that additional reserves remain in the pits until the pit is completely mined out. Reclamation of the pits by filling or partially filling with mine

waste rock could seriously compromise the economic viability of future mining of these existing mineral deposits. In order to temporarily stabilize areas and to initiate the reclamation process as quickly as possible, certain areas will be reclaimed during operations. Interim sites, including any top-soil stockpiles and construction related disturbances will be ripped where compacted and seeded. Those portions of the quarry area which will not be subject to continued disturbance by Georgia-Pacific's activities will be subject to final reclamation concurrent with operations. Final decisions on when a pit is mined out, and when a waste rock dump will no longer be subject to continuing disturbance, must be deferred to the future.

R 647-4-106

106.3 Estimated acreage

105.2.11 SAYS 33 ACRES

✓ We estimate our total disturbance for the next five years will not exceed 25 acres. To cover any extra contingencies, Georgia-Pacific will post a \$50,000 bond at a rate of \$1000 per acre. This will cover 50 acres.

106.5 Existing Soil Types, location of plant growth material

7 The Jornaham series that formed in alluvium from Gypsum Rock and Limestone. The areas are being called Gypsumland, Gobin Mussentuch Complex. Gypsumland is exposed beds of Gypsiferous material. Where Gypsum is out-cropped, vegetation is almost non-existent. Due to the potential limitations inherent in reclamation in arid climates, the shallowness and almost non-existence of the top soil in some areas, it is possible that meeting the success standards for cover or diversity may be infeasible. Georgia-Pacific will take all reasonable surface and seed bed preparation measures necessary to create a viable growth medium. The following actions will be tried to achieve successful re-vegetation:

1. Terraces, contour furrows, or other erosion control features will be incorporated into the reclaimed slopes of the waste piles and reclaimed area.
2. To the maximum extent practicable, all sediment from the Georgia-Pacific Quarry disturbances resulting from up to and including the 100 year, storm event will be contained within the Quarry area.
3. Erosion control measures other than vegetation will be implemented, where necessary to prevent sedimentation of surface drainages.
4. Surface water diversion structures will be designed to prevent headcutting where the diversion re-enters the natural drainage.
5. After final reclamation earthwork, and until the completion of successful reclamation, rill or gullies will be limited to a size which can be traversed safely by the equipment necessary to perform re-vegetation work.

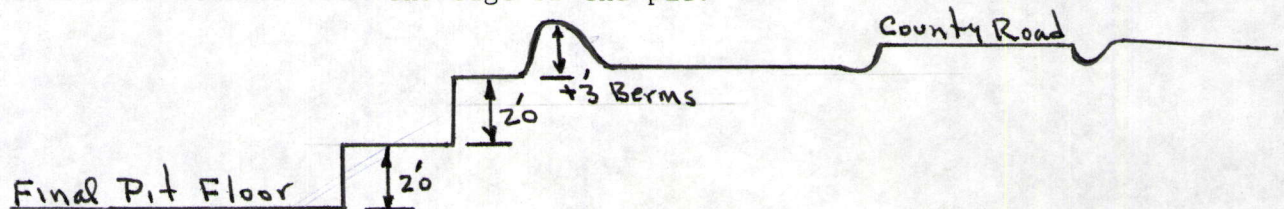
R 647-4-107

107.1.12 - Disposal of Trash, Debris

✓ All trash and debris generated at the quarry site will be transported to the Sigurd Plant and disposed at a permitted landfill.

107.1.15 Construction of Berms, Fences.

✓ The assurance of public safety around the quarry site is a paramount concern. Earthen berms of minimum 3 feet high along the quarry highwalls will be constructed to prohibit access to the pits (note sketch below). Signs will be posted warning of the dangers associated with the pits. Where potential instability of pit walls will compromise the effectiveness of these measures, the walls will be brought to a stable configuration or berms will be located to a stable area removed from the edge of the pit.

107.2 and 107.3 - Drainages to minimized damage and erosion control.

✓ The extent of the drainage channel immediately adjacent (west) of the present quarry area toward upstream is limited (wash originates approximately 1000 feet upstream). In the event we decide to quarry into/through drainage ditch to the west of the present quarry area we will reroute surface runoff by means of a diversion ditch, erosion control measures will be implemented, where necessary to prevent headcutting where the diversion re-enters the natural drainage.

107.6 Concurrent Reclamation on Areas when no longer needed.

✓ As we proposed in our operation plan dated November 19, 1990, reclamation will take reverse sequence of quarrying, and our intentions are to keep unreclaimed surface areas below 25 acres. At present we are reclaiming the areas which was quarried during 1990, 1991. These areas cover approximately five acres. We are hoping to complete this reclamation by the end of 1993.

R 647-4-110

110.1 Current land-use and post-mining land-use.

Prior land-use: Occasional grazing and rangeland uses.

✓ Current land-use: Gypsum quarrying operations and potential future use of the land for mineral exploration, extraction, grazing and rangeland use must also be considered. In addition to four basic steps proposed in our reclamation plan the remaining pit floor and roads will be ripped to a depth of 12 inches and seeded. The erosion control structures will be removed and reclaimed.

110.5 Re-vegetation Planting Program and Top-soil redistribution.

We will seek Soil Conservation Department's recommendation for plant seeds native to the area and plant them accordingly. We have enough top-soil to cover all present quarried areas. This may change in future mining, but we anticipate no top-soil shortage at this time for the next 10 years.

It is assumed that some of the specific measures and the schedule for reclamation activities discussed in this plan may change over the life of the Georgia-Pacific quarry. In these cases, Georgia-Pacific will coordinate with the BLM and DOGM-DNR to amend it's state permit. These changes will generally be refinements of the plan, and as such, will likely qualify as minor modifications.

110.2 Roads, High-walls, Slopes, Drainages, Pits, etc.

Current mining plans have been developed on very little knowledge of the underlying geological structure. At present, it must be assumed that additional reserves remain in the pits until the pit is completely mined out. It is a very good possibility that we will extract the remaining Gypsum.

The final configuration of high-walls prior to reclamation work will consist of two 20 feet high with one 20 foot wide bench. It is understood that should the nature of operation change, a modified or supplemental plan of operations and reclamation may be required.

R 647-4-111

111.2 Reclamation of natural stream channels

The goal of final reclamation is to return the areas to a stable and productive condition that is consistent with and supportive of the pre-operation land-uses. The reclamation program will provide for the protection of public health and safety by removing potential hazards and protecting water quality by establishment of a stable land-form.

Surface water management and erosion control measures will be implemented during operations and reclamation. Measures will be taken to prevent run-off from up-gradient areas and control run-off. Catchment ponds will be built to prevent the discharge of run-off. Georgia-Pacific will take all reasonable surface preparation measures to stabilize natural drainage to the maximum extent practicable.

R 647-4-113 Surety

7 Due to topograph of the area and availability of the top-soil and sub-soil on site, taking into consideration of pit's depth, we believe a reclamation cost estimate of 450/acre is adequate. To cover any extra contingencies and reduce your concern, Georgia-Pacific will post a bond at a rate of \$1000 per acre if it meets your approval.

Sincerely,

GEORGIA-PACIFIC CORP.



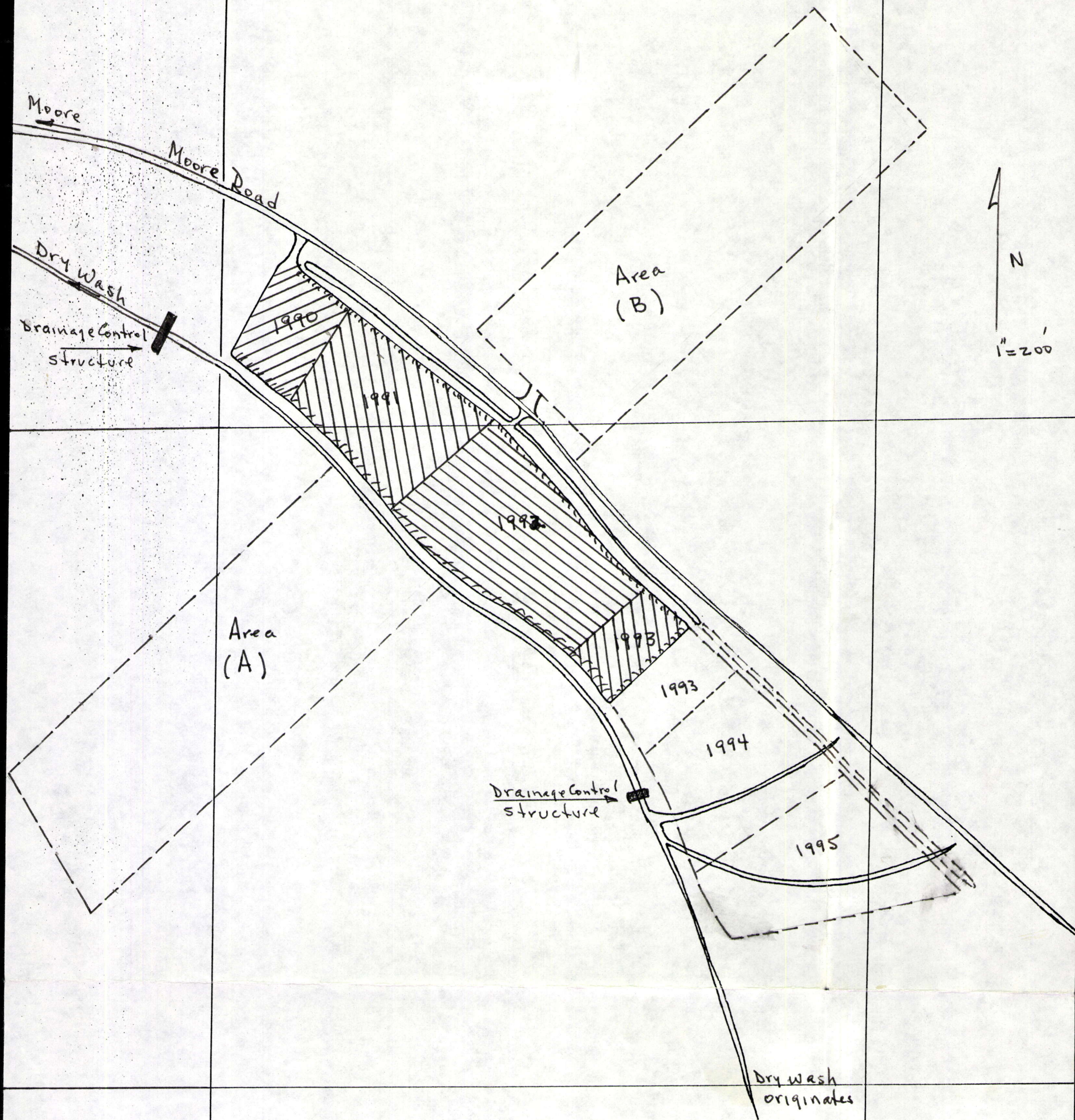
Mr. Bob Shajary
PLANT MANAGER

BS:lb

cc: James Dryden, BLM, San Rafael Resource Area

S 24
T 22 S
R 8 E

S 24
T 22 S
R 9 E



1" = 200'

Sketch (A)

B. SH. 3-01-93